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## RAW SEQUENCE LISTING

DATE: 07/07/2003

PATENT APPLICATION: US/09/692,077D

TIME: 08:49:53

Input Set : N:\Cr4\06272003\I692077.raw

Output Set: N:\CRF4\07072003\I692077D.raw

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1 <110> APPLICANT: Liggett, Stephen
2   Small, Kersten M.
3 <120> TITLE OF INVENTION: Alpha-2B-Adrenergic Receptor Polymorphisms
4 <130> FILE REFERENCE: 10738-43
5 <140> CURRENT APPLICATION NUMBER: US/09/692,077D
6 <141> CURRENT FILING DATE: 2000-10-19
7 <160> NUMBER OF SEQ ID NOS: 26
8 <170> SOFTWARE: PatentIn version 3.2
10 <210> SEQ ID NO: 1
11 <211> LENGTH: 1353
12 <212> TYPE: DNA
13 <213> ORGANISM: Homo sapiens
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17   cgctcgctgc gcgcccctca gaacctgttc ctggtgtcgc tggccgcgcg cgacatcctg      180
18   gtggccacgc tcatcatccc tttctcgtcg gccaacgagc tgctgggcta ctggtacttc      240
19   cggcgcacgt ggtgcgaggt gtacctggcg ctgcagctgc tcttctgcac ctctgccatc      300
20   gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgagccgcgc gctggagtac      360
21   aaactccaagc gcaccccgcg ccgcatcaag tgcatcatcc tcaactgtgtg gctcatcgcc      420
22   gccgtcatct cgctgcgcgc cctcatctac aaggggcgacc agggcccccga gccgcgcggg      480
23   cgccccccagt gcaagctcaa ccaggaggcc tggtagatcc tggcctccag catcggatct      540
24   ttctttgctc cttgctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa      600
25   cgcagcaacc gcagaggtcc caggggccaag ggggggcctg ggcagggtga gtccaaagcag      660
26   ccccgaccgc accatggtgg ggcctttggc tcagccaaac tgccagccct ggcctctgtg      720
27   gcttctgcca gagaggtcaa cggacactcg aagtccactg gggagaagga ggagggggag      780
28   acccctgaag atactgggac ccgggccttg ccacccagtt gggctgccc tcccaactca      840
29   ggccagggcc agaaggaggg tgtttgtggg gcattctccag aggatgaagc tgaagaggag      900
30   gaagaggagg aggaggagga ggaagagtgt gaaccccagg cagtgccagt gtctccggcc      960
31   tcagcttgca gccccccgct gcagcagcca cagggtccc ggggtgctggc caccctacgt      1020
32   ggccaggtgc tcttgggcag gggcgtgggt gctatagggt ggcagtgggt gcgtcgaagg      1080
33   gcgcagctga cccgggagaa gcgcttcacc ttcgtgctgg ctgtggtcat tggcggtttt      1140
34   gtgctctgct ggttcccctt cttcttcagc tacagcctgg gcgccatctg cccgaagcac      1200
35   tgcaagggtgc cccatggcct cttccagttc ttcttctgga tcggctactg caacagctca      1260
36   ctgaaccctg ttatctacac catcttcaac caggacttcc gccgtgcctt ccggaggatc      1320
37   ctgtgcgcgc cgtggaccca gacggcctgg tga                                     1353
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40 <211> LENGTH: 1344
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42 <213> ORGANISM: Homo sapiens
43 <400> SEQUENCE: 2
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46	cgctcgctgc gcgcccctca gaacctgttc ctggtgtcgc tggccgcgcgc cgacatcctg	180
47	gtggccacgc tcatcatccc tttctcgctg gccaacgagc tgctgggcta ctggtacttc	240
48	cggcgcaagt ggtgcgaggt gtacctggcg ctcgacgtgc tcttctgcac ctcgccatc	300
49	gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgagccgcgc gctggagtac	360
50	aactccaagc gcaccccgcg ccgcatcaag tgcacatcc tcaactgtgt gctcatcgcc	420
51	gcccgcactc cgctgccgcc cctcatctac aagggcgacc agggcccccga gccgcgcggg	480
52	cgccccaggt gcaagctcaa ccaggaggcc tggtagatcc tggcctccag catcggtatc	540
53	ttctttgtgc cttgcctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa	600
54	cgcagcaacc gcagaggtcc cagggccaaag ggggggcctg ggcagggtga gtccaagcag	660
55	ccccgaccgc accatgggtg ggctttggcc tcagccaaac tgccagccct ggctctctgt	720
56	gcttctgcca gagaggtcaa cggacactcg aagtccactg gggagaaagga ggagggggag	780
57	acccctgaag atactgggac ccgggccttg ccaccagtt gggtgcctt tcccaactca	840
58	ggccaggggc agaaggaggg tgtttgtggg gcatctccag aggatgaagc tgaagaggag	900
59	gaggaggagg aggaagagtg tgaacccag gcagtgccag tgtctccggc ctacgcttgc	960
60	agcccccgcg tgcagcagcc acagggtccc cgggtgctgg ccaccctacg tggccagggtg	1020
61	ctcctgggca ggggcgtggg tgctataggt gggcagtggt ggcgtcgaag ggcgcagctg	1080
62	acccgggaga agcgtttcac cttcgtgctg gctgtggtca ttggcgtttt tgtgctctgc	1140
63	tggttcccct tcttcttcag ctacagcctg ggcgccatct gccgaagca ctgcaagggtg	1200
64	ccccatggcc tcttcagtt cttcttctgg atcggtact gcaacagctc actgaaccct	1260
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69	<211> LENGTH: 9	
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77	<212> TYPE: DNA	
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83	<211> LENGTH: 9	
84	<212> TYPE: DNA	
85	<213> ORGANISM: Homo sapiens	
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90	<211> LENGTH: 9	
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92	<213> ORGANISM: Homo sapiens	
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94	ctcctcctc	9
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97	<211> LENGTH: 450	
98	<212> TYPE: PRT	
99	<213> ORGANISM: Homo sapiens	

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100 &lt;400&gt; SEQUENCE: 7

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101 Met Asp His Gln Asp Pro Tyr Ser Val Gln Ala Thr Ala Ala Ile Ala
102 1 5 10 15
103 Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu
104 20 25 30
105 Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn
106 35 40 45
107 Leu Phe Leu Val Ser Leu Ala Ala Ala Asp Ile Leu Val Ala Thr Leu
108 50 55 60
109 Ile Ile Pro Phe Ser Leu Ala Asn Glu Leu Leu Gly Tyr Trp Tyr Phe
110 65 70 75 80
111 Arg Arg Thr Trp Cys Glu Val Tyr Leu Ala Leu Asp Val Leu Phe Cys
112 85 90 95
113 Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser Leu Asp Arg Tyr Trp
114 100 105 110
115 Ala Val Ser Arg Ala Leu Glu Tyr Asn Ser Lys Arg Thr Pro Arg Arg
116 115 120 125
117 Ile Lys Cys Ile Ile Leu Thr Val Trp Leu Ile Ala Ala Val Ile Ser
118 130 135 140
119 Leu Pro Pro Leu Ile Tyr Lys Gly Asp Gln Gly Pro Gln Pro Arg Gly
120 145 150 155 160
121 Arg Pro Gln Cys Lys Leu Asn Gln Glu Ala Trp Tyr Ile Leu Ala Ser
122 165 170 175
123 Ser Ile Gly Ser Phe Phe Ala Pro Cys Leu Ile Met Ile Leu Val Tyr
124 180 185 190
125 Leu Arg Ile Tyr Leu Ile Ala Lys Arg Ser Asn Arg Arg Gly Pro Arg
126 195 200 205
127 Ala Lys Gly Gly Pro Gly Gln Gly Glu Ser Lys Gln Pro Arg Pro Asp
128 210 215 220
129 His Gly Gly Ala Leu Ala Ser Ala Lys Leu Pro Ala Leu Ala Ser Val
130 225 230 235 240
131 Ala Ser Ala Arg Glu Val Asn Gly His Ser Lys Ser Thr Gly Glu Lys
132 245 250 255
133 Glu Glu Gly Glu Thr Pro Glu Asp Thr Gly Thr Arg Ala Leu Pro Pro
134 260 265 270
135 Ser Trp Ala Ala Leu Pro Asn Ser Gly Gln Gly Gln Lys Glu Gly Val
136 275 280 285
137 Cys Gly Ala Ser Pro Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu
138 290 295 300
139 Glu Glu Glu Glu Glu Cys Glu Pro Gln Ala Val Pro Val Ser Pro Ala
140 305 310 315 320
141 Ser Ala Cys Ser Pro Pro Leu Gln Gln Pro Gln Gly Ser Arg Val Leu
142 325 330 335
143 Ala Thr Leu Arg Gly Gln Val Leu Leu Gly Arg Gly Val Gly Ala Ile
144 340 345 350
145 Gly Gly Gln Trp Trp Arg Arg Arg Ala Gln Leu Thr Arg Glu Lys Arg
146 355 360 365
147 Phe Thr Phe Val Leu Ala Val Val Ile Gly Val Phe Val Leu Cys Trp
148 370 375 380

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149   Phe Pro Phe Phe Phe Ser Tyr Ser Leu Gly Ala Ile Cys Pro Lys His
150   385                               390           395           400
151   Cys Lys Val Pro His Gly Leu Phe Gln Phe Phe Phe Trp Ile Gly Tyr
152                               405           410           415
153   Cys Asn Ser Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp
154                               420           425           430
155   Phe Arg Arg Ala Phe Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr
156                               435           440           445
157   Ala Trp
158       450
160 <210> SEQ ID NO: 8
161 <211> LENGTH: 447
162 <212> TYPE: PRT
163 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 8
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167   Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu
168       20           25           30
169   Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn
170       35           40           45
171   Leu Phe Leu Val Ser Leu Ala Ala Asp Ile Leu Val Ala Thr Leu
172       50           55           60
173   Ile Ile Pro Phe Ser Leu Ala Asn Glu Leu Leu Gly Tyr Trp Tyr Phe
174       65           70           75           80
175   Arg Arg Thr Trp Cys Glu Val Tyr Leu Ala Leu Asp Val Leu Phe Cys
176       85           90           95
177   Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser Leu Asp Arg Tyr Trp
178       100          105          110
179   Ala Val Ser Arg Ala Leu Glu Tyr Asn Ser Lys Arg Thr Pro Arg Arg
180       115          120          125
181   Ile Lys Cys Ile Ile Leu Thr Val Trp Leu Ile Ala Ala Val Ile Ser
182       130          135          140
183   Leu Pro Pro Leu Ile Tyr Lys Gly Asp Gln Gly Pro Gln Pro Arg Gly
184       145          150          155          160
185   Arg Pro Gln Cys Lys Leu Asn Gln Glu Ala Trp Tyr Ile Leu Ala Ser
186       165          170          175
187   Ser Ile Gly Ser Phe Phe Ala Pro Cys Leu Ile Met Ile Leu Val Tyr
188       180          185          190
189   Leu Arg Ile Tyr Leu Ile Ala Lys Arg Ser Asn Arg Arg Gly Pro Arg
190       195          200          205
191   Ala Lys Gly Gly Pro Gly Gln Gly Glu Ser Lys Gln Pro Arg Pro Asp
192       210          215          220
193   His Gly Gly Ala Leu Ala Ser Ala Lys Leu Pro Ala Leu Ala Ser Val
194       225          230          235          240
195   Ala Ser Ala Arg Glu Val Asn Gly His Ser Lys Ser Thr Gly Glu Lys
196       245          250          255
197   Glu Glu Gly Glu Thr Pro Glu Asp Thr Gly Thr Arg Ala Leu Pro Pro
198       260          265          270

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199      Ser Trp Ala Ala Leu Pro Asn Ser Gly Gln Gly Gln Lys Glu Gly Val
200              275                      280                      285
201      Cys Gly Ala Ser Pro Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu Glu
202              290                      295                      300
203      Glu Glu Cys Glu Pro Gln Ala Val Pro Val Ser Pro Ala Ser Ala Cys
204              305                      310                      315                      320
205      Ser Pro Pro Leu Gln Gln Pro Gln Gly Ser Arg Val Leu Ala Thr Leu
206              325                      330                      335
207      Arg Gly Gln Val Leu Leu Gly Arg Gly Val Gly Ala Ile Gly Gly Gln
208              340                      345                      350
209      Trp Trp Arg Arg Arg Ala Gln Leu Thr Arg Glu Lys Arg Phe Thr Phe
210              355                      360                      365
211      Val Leu Ala Val Val Ile Gly Val Phe Val Leu Cys Trp Phe Pro Phe
212              370                      375                      380
213      Phe Phe Ser Tyr Ser Leu Gly Ala Ile Cys Pro Lys His Cys Lys Val
214              385                      390                      395                      400
215      Pro His Gly Leu Phe Gln Phe Phe Phe Trp Ile Gly Tyr Cys Asn Ser
216              405                      410                      415
217      Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp Phe Arg Arg
218              420                      425                      430
219      Ala Phe Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr Ala Trp
220              435                      440                      445
222 <210> SEQ ID NO: 9
223 <211> LENGTH: 16
224 <212> TYPE: PRT
225 <213> ORGANISM: Homo sapiens
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227      Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
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231 <211> LENGTH: 13
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapiens
234 <400> SEQUENCE: 10
235      Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu Glu Glu Glu
236      1              5              10
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239 <211> LENGTH: 3
240 <212> TYPE: PRT
241 <213> ORGANISM: Homo sapiens
242 <400> SEQUENCE: 11
243      Glu Glu Glu
244      1
246 <210> SEQ ID NO: 12
247 <211> LENGTH: 3
248 <212> TYPE: PRT
249 <213> ORGANISM: Homo sapiens
250 <400> SEQUENCE: 12
251      Cys Glu Pro

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VERIFICATION SUMMARY

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